COMMONWEALTH OF VIRGINIA

Information Technology Resource Management Standard

PROJECT MANAGEMENT

Virginia Information Technologies Agency

Preface

Publication Designation

Commonwealth of Virginia (COV) Information Technology Resource Management (ITRM) Standard GOV2004-02.3.2

Subject

Project Management

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Not applicable

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One (1) year from the effective date, then every two years thereafter.

Authority

Code of Virginia, §2.2-2007
(Powers and duties of the CIO)

Code of Virginia, §2.2-2010
(Powers and duties of the Virginia Information Technologies Agency; "VITA")

Code of Virginia, §2.2-2017
(Powers and duties of the VITA Division of Project Management)

Code of Virginia, §2.2-2014
(*Submission of information technology plans by state agencies and public institutions of higher education; designation of technology resource*.)

Code of Virginia, §2.2-2015
(*Authority of CIO to modify or suspend major information technology projects; project termination)*

Code of Virginia, §2.2-2018; §2.2-2019; §2.2-2020; §2.2-2021
(Project planning approval; Project development approval; Procurement approval for major information technology projects; Project oversight)

Code of Virginia, §2.2-2457; §2.2-2458
(Powers and duties of the Information Technology Investment Board; the "Board")

Code of Virginia § 2.2-2651
(Duties of the Council on Technology Services)

Scope

This policy is applicable to all Executive Branch state agencies and institutions of higher education (hereinafter collectively referred to as "agencies") that are responsible for the management, development, purchase and use of information technology investments in the Commonwealth of Virginia. This standard does not apply to research projects, research initiatives or instructional programs at public institutions of higher education. Local government entities are encouraged to consider the implications of this standard for their work.

Purpose

To establish standards for the management of information technology projects with total cost greater than or equal to $100,000 in the Commonwealth of Virginia (COV).

General Responsibilities (Italics indicate Code of Virginia requirements)

The Information Technology Investment Board (the "Board")

The Information Technology Investment Board is assigned the following general technology management responsibilities*:*

- *Approve or disapprove the development of all major information technology projects as defined in § 2.2-2006. The Board may terminate any major information technology project recommended for termination by the Chief Information Officer pursuant to § 2.2-2015;*
- *Approve strategies, standards, and priorities recommended by the Chief Information Officer for the use of information technology for state agencies in the executive branch of state government;*
- *Approve the four-year plan for information technology projects;*
- *Approve criteria for the review and approval of the planning, scheduling and tracking of major information technology projects as defined in § 2.2-2006;*

Chief Information Officer (CIO)

The Chief Information Officer is assigned the following general technology management responsibilities:

- *Monitor trends and advances in information technology; develop a comprehensive, statewide, four-year strategic plan for information technology*

to include specific projects that implement the plan; and plan for the acquisition, management, and use of information technology by state agencies. The statewide plan shall be updated annually and submitted to the Board for approval. In developing and updating the plan, the CIO shall consider the advice and recommendations of the Council on Technology Services created pursuant to § 2.2-2651.

- *Direct the formulation and promulgation of policies, guidelines, standards, and specifications for the purchase, development, and maintenance of information technology for state agencies, including, but not limited to, those (i) required to support state and local government exchange, acquisition, storage, use, sharing, and distribution of geographic or base map data and related technologies, (ii) concerned with the development of electronic transactions including the use of electronic signatures as provided in § 59.1-496, and (iii) necessary to support a unified approach to information technology across the totality of state government, thereby assuring that the citizens and businesses of the Commonwealth receive the greatest possible security, value, and convenience from investments made in technology.*

- *Direct the development of policies and procedures, in consultation with the Department of Planning and Budget, that are integrated into the Commonwealth's strategic planning and performance budgeting processes, and that state agencies and public institutions of higher education shall follow in developing information technology plans and technology-related budget requests. Such policies and procedures shall require consideration of the contribution of current and proposed technology expenditures to the support of agency and institution priority functional activities, as well as current and future operating expenses, and shall be utilized by all state agencies and public institutions of higher education in preparing budget requests.*

- *Direct the development of policies and procedures for the effective management of information technology investments throughout their entire life-cycles, including, but not limited to, project definition, procurement, development, implementation, operation, performance evaluation, and enhancement or retirement. Such policies and procedures shall include, at a minimum, the periodic review by the CIO of agency and public institution of higher education information technology projects estimated to cost $1 million or more or deemed to be mission-critical or of statewide application by the CIO.*

- *Direct the development of policies and procedures that require VITA to review information technology projects proposed by state agencies and institutions exceeding $100,000, and recommend whether such projects be approved or disapproved. The CIO shall disapprove projects between $100,000 and $1 million that do not conform to the statewide information plan or to the individual plans of state agencies or institutions of higher education.*

- Approve Contracts and Statements of Work for Independent Verification and Validation (IV&V) of major IT projects.

Virginia Information Technologies Agency (VITA)

The Virginia Information Technologies Agency is assigned the following general technology management responsibilities:

- *Prescribe regulations necessary or incidental to the performance of duties or execution of powers conferred under the Code of Virginia, §2.2-2010.*

- *Develop and adopt policies, standards, and guidelines for managing information technology by state agencies and institutions.*

- *Develop and adopt policies, standards, and guidelines for the procurement of information technology and telecommunications goods and services of every description for state agencies*.

The Project Management Division (PMD) of VITA

The Division of Project Management is assigned the following general technology management responsibilities:

- *Implement the approval process for information technology projects developed in accordance with § 2.2-2008;*

- *Assist the CIO in the development and implementation of a project management methodology to be used in the development of and implementation of information technology projects in accordance with this article;*

- *Provide ongoing assistance and support to state agencies and public institutions of higher education in the development of information technology projects;*

- *Assign project management specialists to review and recommend information technology proposals based on criteria developed by the Division based on the (i) degree to which the project is consistent with the Commonwealth's overall strategic plan; (ii) technical feasibility of the project; (iii) benefits to the Commonwealth of the project, including*

customer service improvements; (iv) risks associated with the project; (v) continued funding requirements; and (vi) past performance by the agency on other projects; and

- *Provide oversight for state agency information technology projects.*

Executive Branch (Cabinet) Secretaries

Executive Branch (Cabinet) Secretaries are assigned the following general technology management responsibilities:

- Make appropriate recommendations to the CIO regarding COV enterprise technology programs and projects, throughout the program or project life-cycle, which includes program or project initiation, planning, execution, closeout, and operations and support.
- Review agency major IT projects and make appropriate recommendations to the CIO, throughout the project lifecycle, which includes the project initiation, planning, execution, closeout, and operations and support phases.

Executive Branch State Agencies

State Agencies are assigned the following general technology management responsibilities:

- *The head of each state agency shall designate an existing employee to be the agency's information technology resource who shall be responsible for compliance with the procedures, policies, and guidelines established by the CIO.*
- *Prior to proceeding with any major information technology project, an agency shall submit to the Division* (PMD) *a project proposal, outlining the business need for the project, the proposed technology solution, if known, and an explanation of how the project would support the agency's business objectives and the Commonwealth's information technology plan. The project management specialist may require the submission of additional information if needed to adequately review any such proposal.*
- *Upon approval of the CIO of the project plan, an agency shall submit to the Division* (PMD) *a project development proposal containing (i) a detailed business case including a cost-benefit analysis; (ii) a business process analysis, if applicable; (iii) system requirements, if known; (iv) a proposed development plan and project management structure; and (v) a proposed resource or funding plan. The project management specialist may require the submission of additional information necessary to meet the criteria developed by the Division* (PMD).
- *Upon approval of the Board of the project development proposal involving a major information technology project that requires the procurement of goods or services, the agency shall submit a copy of any Invitation for Bid (IFB) or Request for Proposal (RFP) to the Division* (PMD). *The project management specialist shall review the IFB or RFP and recommend its approval or rejection to the CIO. The CIO shall have the final authority to approve the IFB or RFP prior to its release and shall approve the proposed contract for the award of the project.*
- *Whenever an agency has received approval from the Board to proceed with the development and acquisition of a major information technology project, the CIO shall establish an internal agency oversight committee. The internal agency oversight committee shall provide ongoing oversight for the project and have the authority to approve or reject any changes in the project's scope, schedule, or budget. The CIO shall ensure that the project has in place adequate project management and oversight structures for addressing major issues that could affect the project's scope, schedule, or budget and shall address issues that cannot be resolved by the internal agency oversight committee.*
- *Whenever a statewide or multiagency project has received approval from the Board, the primary project oversight shall be conducted by a committee composed of representatives from agencies impacted by the project, which shall be established by the CIO.*
- Comply with the policies and standards, and consider guidelines for the management of information technology resources in the Commonwealth.
- Plan and manage agency IT projects, throughout the project lifecycle, which includes the project initiation, planning, execution, closeout, and operations and support phases.
- Propose the initiation of major IT projects to the CIO. Manage approved major IT projects, throughout the project lifecycle, which includes project initiation, planning, execution, closeout, and operations and support phases.
- *On an annual basis, each agency must report to the CIO and the director of Planning and Budget performance measurement information for technology projects. The information shall include, but not be limited to, the degree to which projects were completed on time and within budget. The performance reporting will be based on guidance*

issued by the CIO and the Department of Planning and Budget.

Council on Technology Services (COTS)

The Council on Technology Services is assigned the following general technology management responsibility:

- *The purpose of the Council shall be to advise Chief Information Officer on the services provided by the Virginia Information Technologies Agency and the development and use of applications in state agencies and public institutions of higher education.*

Related COV ITRM Policies, Standards, and Guidelines

- IT Strategic Planning & Portfolio Management Standard (To be published)
- Project Manager Selection and Training Standard (COV ITRM Standard 2003-02.3)
- Technology Management Glossary (COV ITRM Standard GOV2003-02.1)
- Project Management Guideline (COV ITRM Guideline GOV2003-02.2)

Table of Contents

SECTION 1. INTRODUCTION 1

1.1 PURPOSE OF THE COMMONWEALTH PROJECT MANAGEMENT (CPM) STANDARD 1
1.2 AUTHORITY 1
1.3 PROJECT MANAGEMENT IN THE COMMONWEALTH OF VIRGINIA 1
1.4 WHAT IS A PROJECT? 2
1.5 COMMONWEALTH IT PROJECT MANAGEMENT LIFECYCLE 4
1.6 PROJECT CATEGORIES 4
1.7 PROJECT COMPLEXITY CLASSIFICATION 4
1.8 COMMONWEALTH IT PROJECT MANAGEMENT GOVERNANCE STRUCTURE 5
1.9 PROJECT SELECTION 8
1.10 PROJECT PLANNING APPROVAL 8

SECTION 2. PROJECT INITIATION 10

2.1 MAJOR IT PROJECT INITIATION 10
2.1.1 Project Development Approval 10
2.1.2 Timeline 11
2.2 NON-MAJOR IT PROJECT INITIATION 12
2.2.1 Project Development Approval 12
2.2.2 Timeline 13
2.3 PROJECT OVERSIGHT 13
2.3.1 Major IT Project Oversight 13
2.3.2 Enterprise IT Project Oversight 14
2.3.3 Non-major IT Project Oversight 14
2.4 INDEPENDENT VERIFICATION AND VALIDATION 14

SECTION 3. IT PROJECT DOCUMENTATION 17

3.1 PROJECT PLANNING 17
3.2 PROJECT EXECUTION AND CONTROL 17
3.3 PROJECT CLOSEOUT 18
3.4 OPERATIONS AND SUPPORT 18

APPENDIX A. IT PROJECT COMPLEXITY MODEL 19

APPENDIX B. IT PROJECT DOCUMENTATION SUMMARY TABLE 24

APPENDIX C. PROJECT MANAGEMENT LIFECYCLE – MAJOR IT PROJECTS ... 30

APPENDIX D. PROJECT MANAGEMENT LIFECYCLE – NON-MAJOR IT PROJECTS GREATER THAN OR EQUAL TO $100,000 31

APPENDIX E. COMMONWEALTH IT PROJECT MANAGEMENT GOVERNANCE STRUCTURE 32

Section 1. Introduction

1.1 Purpose of the Commonwealth Project Management (CPM) Standard

The Commonwealth of Virginia Information Technology Resource Management Project Management Standard (COV ITRM Standard GOV2004-02.3.2) establishes the required agency processes and documentation for all information technology (IT) projects in the Commonwealth of Virginia having a total cost greater than or equal to $100,000. The expected outcome or result of implementing this standard is increased IT project success through sound investment decisions, management commitment and oversight, implementation of a best practice based project management methodology, and defined processes that measure and evaluate project progress throughout the project lifecycle. Implementation of this standard will ultimately achieve a higher return on investment by promoting the use of sound management practices appropriately scaled to fit each project. This standard uses complexity to determine the degree of management and documentation required in detailed planning, execution, and closeout. The goal is to apply just the right amount of management control and documentation needed for a specific project to succeed. In summary, using complexity to determine what documentation and controls to apply, the Commonwealth will neither over manage nor under manage a project.

1.2 Authority

Specific requirements related to the management of IT projects are specified in the *Code of Virginia* and related policies. The CPM Standard is applicable to all state agencies and institutions of higher education that are responsible for the management, development, purchase, and use of information technology investments in the Commonwealth; however, this standard does not apply to research projects, research initiatives, or instructional programs at public institutions of higher education.

Implementation of the standard is effective immediately based on the lifecycle phase of the project on November 1, 2004. All projects not approved for development by November 1, 2004 will implement all sections of the CPM Standard. Projects initiated after September 1, 2003 that have not completed project planning as of November 1, 2004 will implement Section III of the CPM Standard. Those projects that have completed project planning and are beginning, or have begun, the execution and control phase of the project lifecycle will implement Section III requirements for project execution and control, closeout, and post implementation review.

1.3 Project Management in the Commonwealth of Virginia

The methodology and governance structure for Commonwealth IT projects are derived from the *Code of Virginia*. The Commonwealth Technology Management Policy, the IT Strategic Planning and Portfolio Management Standard (to be published), the Project Manager Selection and Training Standard, and the Commonwealth Project Management Guideline directly affect project management practices and activities.

The Commonwealth Technology Management Policy (COV ITRM Policy GOV2003-02.1) establishes a comprehensive and uniform policy for the management and oversight of technology investments in the Commonwealth of Virginia. The policy defines the Commonwealth of Virginia's IT Investment Management (ITIM) approach for managing information technology investments, throughout the lifecycle of technology assets and projects. Complete implementation of the policy includes development and rollout of supporting standards, guidelines, and tools for managing information technology at agencies.

The proposed IT Strategic Planning and Portfolio Management Standard will define systematic processes used by agencies to set broad direction and specific goals for managing IT investments, support delivery of IT services to customers, and manage technology investments within a technology portfolio. The CTM IT Strategic Planning process is an ITIM-based IT strategic planning methodology that looks at IT projects and assets as long-term investments and forms the foundation for selecting, controlling, and evaluating technology investments as part of a business-driven technology portfolio.

The Commonwealth Project Management Guideline (COV ITRM Guideline GOV2003-02.2) defines a methodology for the management of projects by executive branch agencies in the Commonwealth of Virginia. The guideline is aligned with the Project Management Body of Knowledge (PMBOK®) published by the Project Management Institute and industry "best practices." Information provided in the guideline serves as a common reference point and language for the discussion and implementation of project management in the Commonwealth.

The Project Manager (PM) Selection and Training Standard (COV ITRM Standard GOV2003 - 02.3) establishes the minimum qualifications and training standards for project managers of Commonwealth of Virginia IT projects. The standard has five components that accomplish this requirement. The components include:

- PM Testing and Training
- PM Qualifications
- PM Mentoring
- PM Qualification and Selection Process
- PM Qualification and Selection Process Implementation Schedule

1.4 What is a Project?

A project can be defined in terms of its distinctive characteristics. A project is a temporary endeavor undertaken (by an organization) to develop a unique product or service. Temporary means that every project has a definite beginning and a definite end. Unique means that the product or service is different in some distinguishing way from all other products or services (provided by the organization).

Operations and maintenance activities, supporting an existing product or service within an organization, are not projects so long as the focus of the activity is the continued use of the current product of service. Significant cost for a procurement or operational activity does not make the procurement or activity a project. For example, routine upgrades and network

component replacements, conducted as a matter of course in the maintenance and operation of IT assets, are not necessarily projects. However, an activity is a project if that activity leads to modification of an existing product or service, resulting in a new unique product or service within the operational or organizational environment. Utilization of project management principles and techniques in the management of operations and maintenance activities is encouraged.

The Project Management Standard (COV ITRM PM Standard 2004-02.3.2) establishes the required agency processes and documentation for the management of all IT projects in the Commonwealth of Virginia. The applicability of the standard is first determined by the classification of a project as an IT project, based on the IT definition established in the *Code of Virginia* and the Commonwealth Technology Management Glossary. The Commonwealth Technology Management Glossary is available on-line at the Virginia Information Technologies Agency (VITA) Website, http://www.vita.virginia.gov.

Information Technology (IT) - The hardware, software, and related systems, operated by an organization to support the flow or processing of information in support of business activities. In the Commonwealth of Virginia, IT includes telecommunications, automated data processing, databases, the Internet, management information systems, and related information equipment, goods, and services.

Information Technology Project - A temporary endeavor undertaken to deliver a unique product or service, which incorporates the use of information technology as a critical component of the project. An IT project typically includes a significant use of telecommunications, automated data processing, databases, the Internet, management information systems, and related information equipment, goods, and services.

Certain types of endeavors are closely related to projects. These related undertakings are described below:

Program – A program is a group of projects managed in a coordinated way to obtain benefits not available from managing them individually. Many programs include elements of ongoing operations.

Procurement – The procedures for obtaining goods or services including all activities from the planning, preparation, selection, negotiation, contract formation, and processing of a requisition, through receipt and acceptance of delivery and processing of a final invoice for payment.

The Project Management Standard does not require specific processes or documentation for the management of programs or procurements; however, the project management best practices, presented in the standard, may be applied as sound business practices for the management of programs and procurements.

1.5 Commonwealth IT Project Management Lifecycle

The Commonwealth Technology Management Policy (COV ITRM Policy GOV2002-02.1) identifies six phases in the lifecycle of a technology investment. The six phases are Selection, Initiation, Planning, Execution and Control, Closeout, and Operations and Support. The selection of a technology investment is part of the agency IT strategic planning process and identifies the technology investments the agency will manage as projects. Project Management activities begin at Initiation, and proceed through the phases of Planning, Execution and Control, and Closeout. Once a project is completed or closed out, the resulting product or service (asset) produced from the technology investment is managed as a part of normal agency "Operations and Support."

Project governance requirements for approval of IT projects are specified by the *Code of Virginia* at specific points in the project lifecycle. The *Code of Virginia* (*§2.2-2018 and 2019)* prescribes project planning approval and project development approval requirements. Project planning, as described in the *Code of Virginia §2.2-2018*, is the same as the project lifecycle Initiation phase identified in the Commonwealth Technology Management Policy and the Commonwealth Project Management Guideline. Project Development, as described in the *Code of Virginia § 2.2-2019*, includes the lifecycle phases of Project Planning, Execution and Control, and Closeout. Appendix C and D summarize the roles and responsibilities for governance during the lifecycles of major and non-major projects.

The CPM Standard addresses the governance and management of any IT project and is not synonymous with a specific System Development Lifecycle (SDLC). There are several SDLC models applicable to IT projects. The selection of an appropriate model is made based on the nature of the project and the environment in which the project tasks are performed. Agencies must establish specific model standards and selection criteria for determining which model is appropriate for a given project. The activities and tasks of a selected SDLC model are reflected in the project Work Breakdown Structure (WBS) and project schedule.

1.6 Project Categories

Technology projects are expected to be temporary endeavors undertaken to deliver a unique IT product or service for the organization. Technology projects are categorized as major or non-major. Major IT projects are defined in the *Code of Virginia* as *information technology projects that (i) are mission critical, (ii) have statewide application; or (iii) have a total estimated cost of more than $1 million (§ 2.2-2006).* Conversely non-major IT projects are those technology projects with a total estimated cost less than or equal to $1 million, that are not mission critical, and do not have statewide application.

1.7 Project Complexity Classification

The CPM Standard is structured to identify Commonwealth project management requirements and the level of detail required for project documentation based on project complexity. Project complexity drives both the amount of oversight required and extent of project documentation necessary to adequately manage a given project. The IT Project Document Summary Table

(Appendix B) maps the requirements based on level of complexity determined using the IT Project Complexity Model (Appendix A).

The IT Project Complexity Model (Appendix A) provides a scoring mechanism to determine the level of complexity associated with a project. The scoring relates to the level or degree of risk, the technical requirements, the number of members on the project team, total project cost, and the percent of the agency IT budget the project represents. Each question has four responses provided in the model. Each response has a numerical value. The sum of the numerical values, from the responses selected, results in a numerical score that identifies the level of project complexity.

High complexity projects are typically high dollar value projects, requiring extensive integration and stringent control processes. The nature of high complexity projects drives the requirement for extensive planning, documentation, and strictly enforced change and configuration management processes. The project controls, documentation, and required information identified in the IT Project Documentation Summary Table (Appendix B) are required for projects defined as High Complexity in the Commonwealth of Virginia.

Medium complexity projects are typically lower dollar value projects, requiring significant integration, but less stringent control processes than highly complex projects. The nature of medium complexity projects drives the requirement for thorough planning, but less documentation and control processes are needed to deliver the project product or service as specified in the project scope. The project controls, documentation, and required information identified in IT Project Documentation Summary Table (Appendix B) are required for projects defined as Medium Complexity in the Commonwealth of Virginia.

Low complexity projects are typically low dollar value projects, requiring little integration and minimal controls. The nature of low complexity projects drives the requirement for complete planning but minimizes documentation and the control processes needed to deliver the project product or service as specified in the project scope. The project controls, documentation, and required information identified in IT Project Documentation Summary Table (Appendix B) are required for projects defined as Low Complexity in the Commonwealth of Virginia.

1.8 Commonwealth IT Project Management Governance Structure

Legislation enacted in 2003 restructured information technology in the Commonwealth, ushering in comprehensive reform of state government information technology management. The General Assembly shaped a new Commonwealth Technology Management (CTM) governance structure for planning and development of IT projects and the purchasing of IT equipment and services.

Clearly defined governance roles and responsibilities provide a clear understanding of the authority granted and responsibility exacted for the successful accomplishment of project activities. Appendix E provides a graphical depiction of the governance structure.

Commonwealth Information Technology Investment Board

CTM is governed by a ten member Information Technology Investment Board (ITIB) comprised of the Secretary of Technology, the Auditor of Public Accounts, and appointees by the Governor and the Joint Rules Committee of the General Assembly. The ITIB is charged with setting technology strategy and with reviewing and prioritizing major IT technology investments proposed by Commonwealth executive branch agencies and institutions of higher education. The ITIB approves IT policies and standards but may authorize the CIO to approve them within specific guidelines. The ITIB also approves major IT project development, associated procurements, the termination of major IT projects, and the four-year statewide plan for technology. Decisions regarding termination of major IT projects at institutions of higher education will be made in consultation with the institution board of visitors. The ITIB may authorize the CIO to approve or disapprove major IT projects and procurements within specific guidelines.

Information Technology Project Review Committee

The ITIB established the Information Technology Project Review Committee (ITPRC) to conduct detailed reviews and analyses of proposed projects, technology management related policies and standards, and enterprise architecture. The ITPRC recommends to the ITIB development approval or termination of major IT projects and the approval of policies and standards related to technology management.

Commonwealth Chief Information Officer

The Chief Information Officer (CIO) serves as the chief administrative officer of the Virginia Information Technologies Agency (VITA). Other responsibilities of the CIO include developing policies, standards and procedures for technology and project management, granting planning approval for all IT projects with a value that equals or exceeds $100,000, granting development approval for non-major IT projects, approving IT procurements exceeding $100,000, and approving Invitations for Bid (IFB), Requests for Proposals (RFP), and contracts. In addition, the CIO may be authorized to approve or disapprove major IT projects for development by the ITIB, subject to a specific resolution of the ITIB. The CIO may also direct the modification or suspension of any major IT project that has not met the performance measures agreed to by the CIO and the sponsoring agency or public institution of higher education or if such action is appropriate and consistent with the terms of any affected contracts. A decision regarding suspension of a major IT project at an institution of higher education will be made in consultation with the institution board of visitors.

Cabinet Secretaries and Agency Heads

Cabinet secretaries and agency heads may designate secretariat and agency enterprise technology programs in support of secretariat or agency initiatives, with the approval of the Commonwealth CIO. Secretariat or agency enterprise technology programs and projects will be defined, funded, developed, approved, and managed utilizing guidance established within the CTM Policy.

Proponent Secretariat Oversight Committees

Proponent Secretariat Oversight Committees established by the CIO provide oversight for major IT projects as prescribed by this standard. The Proponent Secretariat Oversight Committee represents the business or functional owners and will have the following membership at a minimum:

Proponent Deputy Secretary (Chair and Voting Member)
CIO Representative (VITA – Assistant Director for Project Management)
Department of Planning and Budget (Voting Member and Representative)
Agency Representative (Lead)
Others, as appointed by the Chair and CIO

The Proponent Secretariat Oversight Committee will validate the business case and make recommendations to the CIO on major IT projects proposed for development. The Committee will also review Independent Verification and Validation reports for major IT projects. When issues cannot be resolved by the Internal Agency Oversight Committee level, the issue will be escalated for resolution by the Proponent Secretariat Oversight Committee. The Proponent Secretariat Oversight Committee may resolve the issue or may further elevate the issue to the CIO.

Internal Agency Oversight Committees

The Internal Agency Oversight Committee (IAOC) is appointed by the CIO upon recommendation of the agency. The membership is specified in the project charter. Generally, all stakeholders identified in the charter are represented on the IAOC. A project management specialist from VITA will participate as a non-voting member. The committee provides oversight for major IT projects as prescribed by this standard and will attempt to resolve all issues at their level. When the agency oversight committee cannot resolve issues, the committee chair will escalate resolution to the appropriate level as prescribed by this standard. IAOC is specifically charged with oversight, approval of the project baselines and changes to the project baselines.

VITA Project Management Division

The VITA Project Management Division (PMD), part of the VITA Directorate of Strategic Management Services, was established in the *Code of Virginia* and serves as the Commonwealth Enterprise Program Management Office (EPMO). Roles and responsibilities are established in the Commonwealth Technology Management Policy. On behalf of the Commonwealth Chief Information Officer (CIO) and the Commonwealth Information Technology Investment Board (ITIB), PMD implements an integrated approach to the management of information technology investments.

Project Sponsor

The project sponsor is the individual, usually part of the agency management team, who makes the business case for the project. This individual usually has the authority to define project goals, secure resources, and resolve organizational and priority conflicts.

Program Manager

The program manager provides oversight and coordination of assigned projects, guides and supports the development and enhancement of project management capabilities within an enterprise program office or operational organization(s), ensures appropriate project management processes and procedures are in place, and enforces adherence to established standards and guidelines in the delivery of IT projects.

Project Manager

Every Commonwealth IT project must have a designated project manager. The project manager is responsible for the management of the project from planning through closeout. The project manager for a major IT project will be appointed and qualified by the project sponsor and approved by the CIO. Project sponsors will qualify and approve project managers of non-major IT projects. The CIO will consider the non-major IT project managers qualification status as part of the criteria for non-major IT project development approval. Project managers for major IT projects are responsible for reporting project status. The project manager for a major IT project must be an employee of the Commonwealth or a consultant selected (qualified) in accordance with the Project Manager Selection and Training Standard (COV ITRM Standard GOV2003 - 02.3).

1.9 Project Selection

The Agency IT Strategic Plan (ITSP) is a biannual plan developed and continuously updated in accordance with the Commonwealth budget biennium. Agencies are required to submit an Agency ITSP to the CIO through the Project Management Division.

In the Agency ITSP, agencies provide basic agency profile and strategic direction information, including the agency IT vision and strategies to support agency core business activities, key activities, critical issues, and the initial definitions and descriptions of all major or non-major IT projects which equal or exceed $100,000.

1.10 Project Planning Approval

IT projects are approved as part of the Agency ITSP. When necessary projects are individually reviewed and approved for planning by the CIO before the Agency ITSP is approved. If a project is not part of the Agency ITSP, the agency will submit an Agency ITSP Amendment Request using the Commonwealth Agency Technology Strategic Planning Application (CATSPA). PMD reviews the Agency ITSP amendment request and recommends approval or

rejection to the CIO. Upon final approval of the amendment, the change is posted to the Agency ITSP.

Section 2. Project Initiation

2.1 Major IT Project Initiation

The following procedures apply to all major IT projects, which are defined in the *Code of Virginia* as information technology projects that are: mission critical, have statewide application, or have a total estimated cost of more than $1 million.

2.1.1 Project Development Approval

After approval of the Agency ITSP or ITSP amendment by the CIO, the agency will begin initiation of the IT project as specified in the plan or amendment. Project initiation is a business decision and business owners must take action to insure the success of the project. The business owner (project sponsor) is responsible for management of the project initiation phase of the project lifecycle. A project manager designee may be appointed to assist the project sponsor or business owner in the initiation phase of the project. The project manager is designated through the project charter; therefore, the project manager is responsible for activities that occur after a project is initiated.

The agency will conduct an analysis of project solutions and develop a proposal for the solution selected. The Commonwealth Project Management Guideline (COV ITRM Guideline 2003-02.2), Section 2 – Project Initiation, provides detailed guidance on project analysis and solution selection. Typically, an economic feasibility study or Cost Benefit Analysis (CBA) is prepared to assist in solution selection.

A CBA provides the information needed to make a balanced decision about the cost and benefits, or value, of various potential solutions. The CBA defines project objectives and alternative solutions in terms of costs and benefits. It also documents important assumptions used to derive the project costs and benefits. The final product is a consistent document that provides an understanding of the economic feasibility of the solutions being considered. A CBA is required for all major IT projects *(Code of Virginia, § 2.2-2019)*.

After completing the analysis and solution selection process, the agency will seek development approval by preparing and submitting a business case or project proposal. Agencies will use the detailed project proposal (including risk assessment and Cost Benefit Analysis) and project charter templates found in Section 2 – Project Initiation, of the Commonwealth Project Management Guideline. All sections of the project proposal and project charter templates must be completed before submission to the PMD.

In the project charter, the agency will propose the membership of an Agency Internal Oversight Committee for CIO approval *(Code of Virginia, § 2.2-2021 – Project Oversight)*. The Oversight Committee organization must include a representative from the VITA PMD. The agency submits electronic copies of the completed project proposal and project charter to the designated VITA PMD e-mail account. The agency must submit an electronic or paper copy of the project charter signature page signed by the agency head, project sponsor, and project manager (designee) to the VITA PMD.

Upon receipt of the electronic copies of the project proposal and project charter, PMD will perform an initial review of the documents and provide feedback to the agency. PMD will also coordinate a Proponent Secretariat Oversight Committee meeting to review the project proposal and charter. The Proponent Secretariat Oversight Committee recommends approval or rejection of the project to the CIO. If the Committee recommends approval, the proponent secretary or deputy secretary signs the charter. PMD completes a final review of the project proposal and project charter and recommends approval or rejection of the project to the CIO.

The final review by PMD will include an analysis of the project proposal and charter using balanced scorecard criteria approved by the ITIB. The balanced scorecard criteria for major IT project evaluation is found on the project management page of the VITA Website (http://www.vita.virginia.gov/projects/projects.cfm). PMD uses a modified Delphi methodology to conduct reviews of projects using the balanced scorecard evaluation criteria. The Delphi method of analysis is utilized to validate and quantify subjective analysis of independent reviewers. The modified approach requires independent review by two project management specialists. The results are consolidated and reviewed by the PMD Associate Director or a designated third project management specialist. The PMD Associate Director will approve the final evaluation presented to the CIO and ITIB.

The CIO reviews the balanced scorecard recommendation, proposal, and charter. The ITIB has delegated authority to the CIO for approval or disapproval of major IT projects and procurements so long as the CIO provides notice to the ITIB members. If no member of the ITIB requests a review of the project, the CIO will issue a letter formally approving the project for development. If any member of the ITIB requests a review of the project, the CIO will develop and issue a recommendation to the Information Technology Investment Board. The CIO will direct PMD to coordinate (with the agency or institution) the presentation of the proposal and charter to the ITIB. PMD and the agency or institution will present the project to the ITIB through the Information Technology Project Review Committee (ITPRC). Upon approval of the ITIB, the Chair of the ITIB will issue a letter formally approving the project for development and may authorize procurements subject to CIO review and approval of those procurements greater than or equal to $100,000. Contract awards and procurements for major IT project development activities will not be authorized before development approval by the ITIB.

2.1.2 Timeline

Major IT projects not included in the Agency ITSP require an ITSP amendment before being considered by the ITIB for development approval. Fifteen workdays are required for review and approval of an IT strategic plan amendment by VITA PMD.

Project proposals and charters that must be considered by the ITIB are submitted to VITA PMD at least 30 workdays before the ITIB meeting where the project will be presented. Proposals and charters received within 30 workdays of a scheduled board meeting will normally be deferred to the next board meeting. Specific meeting dates are posted on the ITIB Web site (http://www.vita.virginia.gov/ITIB/ITIB.cfm).

Upon approval of a major IT project, initial baseline and project background information, derived from the project proposal and charter will be entered into the Commonwealth Major IT Project Status Report Dashboard (Dashboard). PMD will coordinate the entry of this information with the project manager of the project.

2.2 Non-major IT Project Initiation

Non-major IT projects are technology projects with a total estimated cost less than or equal to $1 million, that are not mission critical, and do not have statewide application. Based on the recommendation of the VITA PMD, the CIO approves or disapproves planning (Section 1.10, Project Planning Approval) and development of non-major projects that have a cost between $100,000 and $1,000,000. Selected institutions of higher education (Virginia Community College System and members of the Virginia Association of State Colleges and University Purchasing Professionals (VASCUPP) as of July 1, 2003) have delegated authority from the CIO to make the decision on planning approval and development of non-major IT projects from $100,000 to $1 million. An institution of higher education with delegated authority will provide regular status reports on non-major IT projects as required by the CIO. Delegated authority does not exempt the institutions of higher education from implementation of or adherence to Commonwealth policies and standards for the management of non-major IT projects. The following procedures apply to all non-major IT projects with a cost equal to or exceeding $100,000.

2.2.1 Project Development Approval

After a project has received planning approval (Section 1.10, Project Planning Approval), the agency will conduct an analysis of the project solutions. The Commonwealth Project Management Guideline (COV ITRM Guideline GOV 2003-02.2), Section 2 – Project Initiation provides detailed guidance on project analysis and solution selection.

After agency management completes the project analysis and solution selection process, the agency will prepare and submit for approval a detailed project proposal and project charter using the templates found in Section 2 – Project Initiation, of the Commonwealth Project Management Guideline. The Agency must submit electronic copies of the completed project proposal and project charter to the designated VITA PMD e-mail account. The agency must submit an electronic or paper copy of the project charter signature page signed by the agency head, project sponsor, and project manager (designee) to the VITA PMD.

PMD reviews the project proposal and charter and recommends approval or rejection of the project to the CIO. Upon CIO action, the agency will be provided a project (approval/disapproval) decision notice.

2.2.2 Timeline

Non-major IT projects not included in the Agency ITSP must receive CIO planning approval through submission of an ITSP amendment before being considered by the CIO for development approval. Fifteen (15) workdays are required for review and approval of an IT strategic plan amendment by VITA PMD. Agencies should allow an additional 15 workdays for review and approval of the project proposal and charter by the CIO.

2.3 Project Oversight

2.3.1 Major IT Project Oversight

Major IT projects are subject to periodic review by the CIO. For major IT projects, the CIO is required by the *Code of Virginia* to establish internal agency oversight committees, multi-agency oversight committees for statewide application projects, and oversight structures for addressing issues that cannot be resolved by internal agency oversight committees.

The Internal Agency Oversight Committee structure and designated committee members are identified in the project charter. When the Internal Agency Oversight Committee cannot resolve an issue, PMD will assist the agency in coordination with the Chair of the Proponent Secretariat Oversight Committee to convene a meeting of the Proponent Secretariat Oversight Committee. The Proponent Secretariat Oversight Committee will review and resolve the issue or make recommendations to the CIO for issue resolution beyond the scope of the secretariat. The CIO will review the recommendations of the Proponent Secretariat Oversight Committee. The CIO may approve or disapprove an issue resolution strategy or may recommend to the ITIB suspension or termination of the project.

The baseline for project cost (budget), schedule, and performance, including scope, established in the project charter, is the initial baseline for the project. Upon completion of detailed planning, the Internal Agency Oversight Committee will establish an updated project baseline with approval of the project plan by the CIO. The Commonwealth Technology Management Policy (COV ITRM Policy GOV 2003-02.1) states, "The CIO, upon recommendation of the Internal Agency Oversight Committee, must approve project plans including project cost, schedule, and performance baselines for Major IT Projects." The CIO authorizes PMD to review and approve the project plans if the project baselines accurately reflect the project charter.

The Internal Agency Oversight Committee will approve all changes to the cost or schedule baseline where the new cost or schedule estimate will not exceed 10% of the cost or schedule estimate in the approved charter baseline. If a project baseline change results in a performance or scope change or an increased cost or schedule change (delay) greater than 10% from the approved project charter, the Internal Agency Oversight Committee will notify the Commonwealth CIO, Chair of the Proponent Secretariat Oversight Committee, and PMD in writing of the change. The Proponent Secretariat Oversight Committee will review and recommend approval or disapproval to the Commonwealth CIO. The Commonwealth CIO approves or disapproves changes to the baseline that exceed 10%. Additionally, the CIO reports

the approved changes in baseline of major IT projects to the ITIB. The CIO may also suspend the project or recommend to the ITIB termination of the project.

Agencies may request suspension or cancellation of active projects or reactivate suspended projects. The CIO will approve all suspension, cancellation, and reactivation requests made by agencies for active or suspended major IT projects. To reactivate a project, agencies will submit a written request and revised charter and proposal through PMD and the Proponent Secretariat Oversight Committee. Based on staff and Proponent Secretariat Oversight Committee recommendations, the CIO may approve suspension, cancellation, and reactivation or require review and approval of the project by the ITIB.

2.3.2 Enterprise IT Project Oversight

Enterprise projects (multi-agency, statewide application projects) are major IT projects. The CIO will establish a multi-agency oversight committee for enterprise projects composed of representatives from all agencies or institutions of higher education impacted by the project. The multi-agency oversight committee will exercise primary project oversight, in the same manner and with the same limitations, as the internal agency oversight committee.

2.3.3 Non-major IT Project Oversight

Oversight of non-major IT projects is exercised directly by the agency through the project sponsor. Sponsors for non-major IT projects are encouraged but are not required to establish an oversight committee. The project sponsor approves the project plan and establishes the project baselines. The project sponsor also approves changes to project baselines. When a change to the project baseline results in a revised cost or schedule estimate which exceeds 20% of the cost or schedule estimate documented in the project charter, the project sponsor must notify PMD of the baseline change. In addition, the project sponsor must notify PMD of any changes to project performance or scope documented in the project charter. PMD will review and make recommendations to the CIO. The CIO must approve or disapprove changes to charter performance and scope, budget, or schedule resulting in variances exceeding 20% of the estimates established by the approved project charter.

2.4 Independent Verification and Validation

Agencies requesting development approval for a major IT project must identify the proposed Independent Verification and Validation (IV&V) milestones and describe the IV&V strategy for the project in the project proposal (Project Milestones) and project charter (Project Organization) respectively. Following project development approval, project managers for all major IT projects must develop a comprehensive plan to implement IV&V strategy.

Verification and Validation (V&V) are processes that seek to:

- Verify, objectively, that the results of project activities fulfill their requirements

- Validate, objectively, that the project products and services satisfy user needs under defined operating conditions

IV&V adds value to project management and oversight by:

- Increasing the probability that project products and services meet their requirements
- Improving product and service performance
- Supporting a sponsor's decision to accept a product or service
- Reducing development cost
- Shortening the project schedule
- Reducing risk
- Improving project management and oversight review and decision making

IV&V is a quality assurance process carried out by an independent third party. The best practice is to acquire the services of a qualified service provider. Qualified service providers will have experience and training in verification and validation audits commensurate with the scope and nature of the project. In any case, the service provider must be completely independent, having a separate budget and line of responsibility from that of the project manager. IV&V service providers must be free of any conflict of interest in a project where they provide IV&V contracted support. IV&V service providers are disqualified from providing additional consulting resources (outside of IV&V) on any project that they are auditing under contract.

Generally, project managers design their IV&V plans to fit the size, scope, and complexity of the project. During detailed project planning, the comprehensive IV&V plan is completed as part of the Quality Management Plan. IV&V plans for high complexity major IT projects will include the review of the technical, financial, and management aspects of the project and will establish scheduled IV&V reviews and reports as follows:

- At completion of the detailed project plan and before project execution begins.
- At a minimum, one in-progress review during project execution and quarterly reviews for all projects with schedules greater than 9 months duration.
- At testing phase (if testing is a component of the project), validate the test plan and testing.
- At project closeout to validate the success of the project.

IV&V plans for medium complexity major IT project will include the review of the technical, financial, and management aspects of the project and will establish scheduled IV&V reviews and reports as follows:

- At completion of the detailed project plan and before execution begins.
- At a minimum, one in-progress review during project execution and semi-annual reviews for all projects with schedules greater than 18 months duration.
- At project closeout to validate the success of the project.

IV&V plans for low complexity major IT project will include the review of the technical, financial, and management aspects of the project and will establish scheduled IV&V reviews and reports as follows:

- At completion of the detailed project plan and before execution begins.
- At project closeout to validate the success of the project.

The Internal Agency Oversight Committee will review and approve the IV&V plan as a component of the project plan. After the Agency Oversight Committee approves the IV&V plan, the project manager submits the approved plan to PMD for review by the CIO. When the plan is implemented, the service provider sends copies of all IV&V reports directly to the Internal Agency Oversight Committee, Proponent Secretariat Oversight Committee, and the CIO and ITIB through PMD. The IV&V reports supplement and validate Dashboard reporting.

For major IT projects, agencies will engage qualified service providers through VITA using standing contracts, statements of work, and report templates established and maintained by PMD. PMD will qualify IV&V service providers, maintain a list of qualified IV&V service providers, contract IV&V service providers for major IT projects, and coordinate IV&V service provider activities among major IT projects.

Section 3. IT Project Documentation

The degree of project complexity drives both the amount of control required and extent of project documentation necessary to adequately manage a project. In general, the requirements for documentation during planning, execution and control, closeout, and operations and support are not based on major and non-major project categories. The requirement for documentation is based principally on the level of project complexity. There are some exceptions where a specific documentation requirement for major projects is specified in *Code* or policy. Exceptions are noted in Appendix B.

3.1 Project Planning

Project planning is the process of defining and organizing activities and resources to deliver a unique product or service. The project plan is the primary document developed during the planning phase of the project lifecycle and communicates project activities in terms of: what tasks will be performed; who will perform the tasks, when will the tasks be performed, what resources will be applied to accomplish the tasks, and how the tasks will be sequenced.

The agency head or project sponsor should approve project plans for IT projects. The Technology Management Policy (COV ITRM Policy GOV 2003-02.1) states, "The CIO, upon recommendation of the Internal Agency Oversight Committee, must approve project plans including project cost, schedule, and performance baselines for Major IT Projects." The CIO authorizes PMD to review and approve the project plans if the project baselines accurately reflect the project charter. Project plans are revised as needed to reflect changes approved by the agency project management organization and Internal Agency Oversight Committee (reference paragraph 2.3.1, Major IT Project Oversight).

A fundamental component of project planning is the development of metrics to gauge and evaluate project progress. The primary tool used in performance measurement is earned value analysis. The application of earned value analysis is documented in the project performance plan.

3.2 Project Execution and Control

Project execution and control phase is the phase of the project lifecycle where the tasks that build the unique product or service are executed. Project execution and control begins when the project plan is approved and the resources necessary for executing the tasks are assembled. Project execution and control should be in accordance with the approved project plan.

Earned value analysis is the primary method of performance measurement, or control, employed during the project execution and control phase of the project lifecycle. Earned value analysis integrates scope, cost, and schedule measures to assess project performance. Results from an earned value analysis may indicate potential deviation from the project plan baseline. Earned value analysis processes are incorporated into the project through performance planning.

The Agency Internal Oversight Committee will conduct regular reviews of major IT project execution. Project managers must report the status of major IT projects to the agency head, the proponent Secretary, and the CIO via the Commonwealth IT Project Status Report "Dashboard," according to the reporting schedule established by the CIO. For non-major IT projects, the agency will conduct regular reviews of the project execution and establish procedures for regularly reporting project status to the agency head and other key stakeholders.

3.3 Project Closeout

Project closeout is the last phase in the Commonwealth project lifecycle. Closeout begins when the user accepts the project deliverables, establishing operational products or services, and the project oversight authority concludes that the project has satisfied the project purpose stipulated in the project charter. The major focus of project closeout is administrative closure, logistics, and documentation of lessons learned or best practices.

Major IT projects will submit a final project status report (entered into the "Dashboard" by the Project Manager and approved by the CIO) and a formal closeout report approved by the Agency Internal Oversight Committee. Project sponsors will approve and submit to PMD project closeout reports for non-major IT projects with a cost equal to or exceeding $100,000.

3.4 Operations and Support

Once a project is complete, products and services are transferred to the operational unit of the organization where those products and services are managed and supported. A Post Implementation Review (PIR) will be performed for major IT projects (as required in the Technology Management Policy) after the asset has become operational for a sufficient period of time (typically six to 12 months). The PIR evaluates whether the product or service is delivering the expected results. Post implementation review should, validate the project cost benefit analysis and return on investment established in the project proposal.

Appendix A. IT Project Complexity Model

The IT Project Complexity Model provides a scoring mechanism to determine the complexity of Commonwealth IT projects. There are many factors, beyond the basic definition of major and non-major projects, to consider when deciding on the level of required documentation and oversight for a given project. The following questions and responses were developed to assist agencies in determining the complexity of selected IT projects. The Project Complexity Calculator – Scoring Matrix has been validated using the Commonwealth IT investment portfolio and Dashboard. Select the most appropriate response and total the points to determine the complexity level of a project.

	Project Complexity Calculator - Scoring Matrix								
#	**Question**	**Response 1**	**Score**	**Response 2**	**Score**	**Response 3**	**Score**	**Response 4**	**Score**
1	What is the total project cost?	Less than $100,000	10	Between $100,000 and $500,000	20	Between $500,000 and $1,000,000	30	Greater than $1 Million	40
2	What is the estimated total cost for hardware?	Less than $100,000	2	Between $100,000 and $500,000	4	Between $500,000 and $1,000,000	6	Greater than $1 Million	8
3	What is the estimated total cost for software?	Less than $100,000	2	Between $100,000 and $500,000	4	Between $500,000 and $1,000,000	6	Greater than $1 Million	8
4	What is the estimated cost of application development or software configuration services?	Less than $100,000	2	Between $100,000 and $500,000	4	Between $500,000 and $1,000,000	6	Greater than $1 Million	8
5	How much confidence is there in the expenditure and funding projections?	Accuracy of budget estimate is greater than 95% and less than or equal to 100%.	2	Accuracy of budget estimate is greater than 85% and less than or equal to 95%.	4	Accuracy of budget estimate is greater than 50% and less than or equal to 85%	8	Accuracy of budget estimate is less than or equal to 50%.	16

Appendix A. Project Complexity Model (Continued)

#	Question	Response 1	Score	Response 2	Score	Response 3	Score	Response 4	Score
6	What percentage of the agency budget does the project represent?	Project is less than 2% of the agency budget	2	Project is greater than or equal to 2% but less than 5% of the agency budget	4	Project is greater than or equal to 5% and less than 15% of the agency budget	6	Project is 15% or more of the agency budget	8
7	Is the project sponsor fully resourcing the project?	Sponsor owns all the resources needed	2	Sponsor owns most of the resources needed	4	Sponsor has control of most of the resources needed	6	Sponsor has control of some of the resources needed	12
8	What is the size of the Project Team (Full Time Equivalents - FTE)?	No FTEs assigned	2	1 to 2 FTE	3	2 to 5 FTE	6	5 or more FTE	12
9	What is the project manager's authority over the project?	High	2	Moderate	4	Limited	8	Low	16
10	To what degree are the project team members collocated?	90-100% of the team in the same location	1	50%-90 of team in same location	2	25% - 50% of team in same location	4	25% or less of team in same location	6
11	What is the project's duration?	Duration is less than 6 months	2	Duration is 6 to 12 months	4	Duration is 12 to 24 months	8	Duration is greater than 24 months	16
12	How much variation in the schedule can be tolerated?	Schedule is not fixed and therefore highly flexible	3	Schedule can tolerate major variations	6	Schedule can tolerate minor variations	9	Schedule is fixed	12
13	Are there any dependencies and/or inter-related projects?	There are no major dependencies or inter-related projects	3	There are some dependencies and/or inter-related projects, but considered low risk	6	There are some major dependencies and/or inter-related projects, that create a moderate level of risk	9	There are significant dependencies and/or inter-related projects that place the project at a high level of risk	12

Appendix A. Project Complexity Model (Continued)

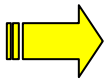
#	Question	Response 1	Score	Response 2	Score	Response 3	Score	Response 4	Score
14	Has the agency and/or vendor executed similar projects?	Agency and vendor have executed many similar projects successfully	2	Agency or vendor have executed several similar projects	4	Agency or vendor have executed a similar project	8	Neither the agency nor the vendor has executed a similar project	12
15	Does the project address state and Federal mandates?	The project has little or no direct impact on accomplishment of state and Federal mandates	2	The project enhances accomplishment of state and Federal mandates	4	The project is important to the accomplishment of state and Federal mandates	8	The project is critical to accomplishment of sate and Federal mandates	12
16	How will the failure of the project impact the customers?	There is no impact of project failure on the customers	0	Impact of project failure on customers is minimal	4	Impact of project failure on customers is moderate	8	Impact of project failure on customers is high	16
17	What is the anticipated involvement of the users (customers) with System Design and Testing?	Not applicable	0	Highly involved in System Design and Testing, provide significant input, and have significant ownership of system	4	Play minor roles or have moderate impact on System Design and Testing	6	Minimal or no user involvement with System Design and Testing or little user input into process	8
18	What is the anticipated involvement of the End Users in the Definition of Project Requirements and Scope?	Requirements well-established, scope defined, users accept with no changes	2	Requirements well-established, scope defined, users accept with few changes	4	Requirements defined but changes to scope expected from users	8	Rapidly changing size or scope; requirements not defined and not accepted users	16

Appendix A. Project Complexity Model (Continued)

#	Question	Response 1	Score	Response 2	Score	Response 3	Score	Response 4	Score
19	How important is the project to successful execution of agency core business activities?	The project is/has little or no direct impact on current core business activities	2	The project enhances organization core business activities	4	The project is important to the organization core business activities	6	The project is critical to the organization core business activities	8
20	How significant is the project impact on business process?	No business process is impacted	0	No critical business processes are impacted	4	Critical business processes are impacted	6	Most business processes are impacted	8
21	What is the level of change to the business unit?	Impacts a single business unit	2	Impacts a number of business units	4	Impacts a whole agency	6	Impact more than one agency	12
22	Is the project using proven technology?	The technology is proven and has been available for a number of years	2	The technology has been available for several years	4	The technology has been developed but is very new	8	The technology is in development	12
23	Is the proposed solution applied in a tried or proven way?	Application of the technology is tried and proven	3	Application of the technology has been tried and is partially proven	6	Application of the technology that has been tried but is not proven	9	Application of the technology which has never been tried	12

Appendix A. Project Complexity Model (Continued)

#	Question	Response 1	Score	Response 2	Score	Response 3	Score	Response 4	Score
24	Does this project require data conversion?	No data conversion is required	0	Data conversion from other sources has little impact	4	Data conversion from other sources has some impact	6	Data conversion from other sources has a significant impact	8
25	What is the overall risk evaluation of the project (see project proposal)?	No risk	5	Low risk	10	Medium risk	20	High risk	40
			55		**125**		**211**		**338**



Low Complexity	Medium Complexity	High Complexity
55-124 range	**125-210 range**	**211- 338 range**

Appendix B. IT Project Documentation Summary Table

The Project Documentation Summary Table provides a list of the "Required Information" for a project based on project complexity*. The templates listed in this table, from the Commonwealth Project Management Guideline, are formats for "Required Information," based on best practices. The Commonwealth Project Management Guideline templates are identified with the word "(Template)." The only required template in this table is the Project Closeout Report template.

*See the Project Complexity Model or Calculator to determine the level of complexity.

Documentation	Required Information	High Complexity	Medium Complexity	Low Complexity
Project Planning				
Project Plan Executive Summary (Template)				
	Points of Contact	x		
	Contractor Information	x		
	Charter - Summary	x		
	Business Problem	x	x	x
	Assumptions	x	x	x
	Project Description	x	x	x
	Project Scope	x	x	x
	Summary Statement - Appendices	x		
Project Performance Plan (Template)				
	Project Business Objectives, Goals and Metrics	x	x	x
	Deliverable Description and Acceptance Criteria	x	x	
Work Breakdown Structure (Template)				
	WBS Elements	x	x	

Appendix B. IT Project Documentation Summary Table (Continued)

Documentation	Required Information	High Complexity	Medium Complexity	Low Complexity
	Resource Requirements	x	x	
Resource Plan (Template)				
	Resource Allocated	x		
	Resource as related to task, cost and duration	x		
	Resource differences from project charter	x		
Project Schedule (Template)				
	WBS Elements	x	x	x
	Estimated Duration	x	x	x
	Start and Finish Dates	x	x	x
	Resource Requirement	x	x	x
	Predecessor Task (if applicable)	x	x	x
Budget Plan (Template)				
	Funding Source	x	x	x
	Planned Expenditures by WBS Elements	x	x	
	Contingency (Risk) Budgeting	x	x	
	Planned Expenditures	x	x	
	Project Spending Plan	x	x	
Procurement Plan (Template)				
	Products, Goods, or Services to be Procured	x		
	Procurement Schedule – Task/Procurement Matrix	x	x	

Appendix B. IT Project Documentation Summary Table (Continued)

Documentation	Required Information	High Complexity	Medium Complexity	Low Complexity
Risk Management Plan (Template)				
	Risk Management Strategy	x		
	Risk Identification Process	x	x	x
	Risk Evaluation	x	x	x
	Risk Mitigation Options	x	x	x
	Risk Plan Maintenance	x		
	Risk Management Responsibilities	x	x	
	Risk Mitigation Cost	x		
	Contingency (Risk) Budget	x	x	
Communications Plan (Template)				
	Stakeholder Information Requirements	x		
	Information Descriptions, Collection, and Reporting	x		
	Distribution Methods	x		
	Distribution Groups	x		
	Method for Updating the Communications Plan	x		
Change and Configuration Management Plan				
	Change Control Items	x	x	
	Change Control Process	x	x	

Appendix B. IT Project Documentation Summary Table (Continued)

Documentation	Required Information	High Complexity	Medium Complexity	Low Complexity
	Configuration Management Control Items	x	x	
	Configuration Management Control Process	x	x	
	Naming and Marking Methods	x		
	Submission and Retrieval of Control Items	x		
	Version Control	x		
	Storage, Handling, and Disposition of Project Media	x		
Quality Management and IV & V Plan (Template)				
	Product Testing	x	x	
	Project Auditing	x		
	IV & V for Major IT Projects only (see section 2.4 for specific requirements)	x	x	x
Project Execution and Control				
Project Status Report (Template)				
	Previous Period Status	x	x	
	Current Period Status	x	x	
	Significant Accomplishment (Current Period)	x	x	x
	Planned Activities for Next Period	x	x	x
	Project Issues	x	x	x
	Action Items	x	x	

Appendix B. IT Project Documentation Summary Table (Continued)

Documentation	Required Information	High Complexity	Medium Complexity	Low Complexity
	Risk Status	x	x	
	Resource Usage	x	x	
Change Control Request (Template)				
	Proposed Change Description	x		
	Justification for Proposed Change	x		
	Impact Statements	x		
	Change Request Initial Review and Management Decision	x		
Issue Log and Issue Management Document (Template)				
	Issue Type	x		
	Issue Description	x	x	
	Potential Impact	x		
	Issue Assignment	x	x	
	Issue Resolutions Alternatives and Recommendations	x	x	
	Management Action, Recommendation and Approval Signatures	x		
User Acceptance (Template)				
	Project Deliverables and Acceptance Criteria Validation	x	x	
	Outstanding Issues and Resolution Plan	x	x	

Appendix B. IT Project Documentation Summary Table (Continued)

Documentation	Required Information	High Complexity	Medium Complexity	Low Complexity
	Acceptance Signatures	x	x	
Project Closeout Report (Template) **				
	Full Template	x	x	x
Operations and Support				
Post Implementation Report for Major IT Projects				
	How well the deliverable solved the Business Problem identified in the project charter	x	x	x
	Impact the deliverable had on the Agency Core Business Activities	x	x	x
	Project Performance Measures	x	x	x
	Actual operational cost versus projected operational cost	x	x	x
	User acceptance or satisfaction with the delivered product	x	x	x
	Organizational change required or resulting from the deliverable	x	x	x
	Actual Return on Investment for the period versus projected return on investment	x	x	x

**Major and non-major IT projects > $100,000

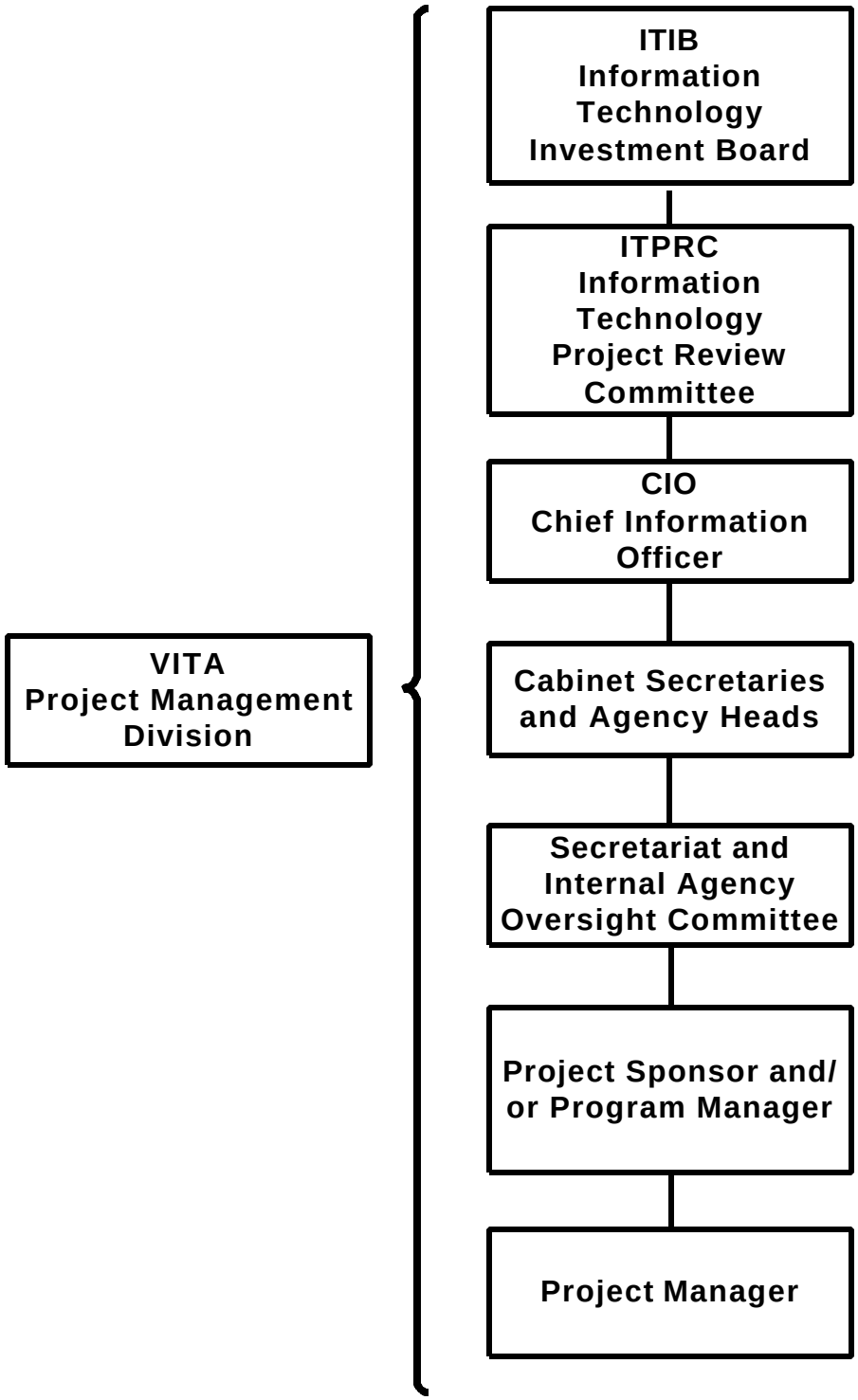
Appendix C. Project Management Lifecycle – Major IT Projects

Lifecycle Phases	Selection	Initiation	Planning	Execution & Control	Closeout	Operations & Support
Decision Points	**Approved for Planning** →	**Approved for Development** →	**Baseline Approved** →			
Roles and Responsibilities for Project Management						
IT Investment Board (ITIB)		Approve for Development	May Terminate Project	May Terminate Project	Approve Project Closeout	Approves Post Implementation Action
Information Technology Project Review Committee (ITPRC)		Recommend Project Initiation to ITIB	Resolve Issues as Required Modify, Suspend, or Recommend Termination	Review Project Status and IV&V Reports Modify, Suspend, or Recommend Termination	Recommend Project Close-out to ITIB	Recommends Post Implementation Action to ITIB
Chief Information Officer (CIO)	Approve Agency IT Strategic Plan	Recommend Project Initiation to ITIB	Resolve Issues as Required Modify, Suspend, or Recommend Termination	Approve Project Status Report (Dashboard) and Review Project IV&V Reports Modify, Suspend, or Recommend Termination	Recommend Project Close-out to ITIB	Recommends Post Implementation Action to ITIB
Cabinet Secretaries and Agency Heads	Selects Projects to Include in the IT Strategic Plan	Approves project proposal		Evaluates Overall Project Progress		Evaluates Post Implementation Report
Secretariat and Internal Agency Oversight Committee			Validates, Recommends or Approves Project Plan as Appropriate	Review Project Progress (when directed) and Review Project IV&V Reports	Recommend Project Closeout	Conducts Post Implementation Review
VITA Project Management Division (PMD)	Recommend Approval of IT Strategic Plan to CIO	Recommend Project Initiation to CIO/ITPRC	Assist and Support Project Planning Review Plan for CIO	Review Project Progress Assist and Support Project Development	Complete Final Project Evaluation	Review Post Implementation
Project Sponsor/Program Manager	Select project in Agency IT Strategic Plan	Submit Project and Proposal	Review Required and Approves Documentation – COV IT PM Standard	Review Required Documentation – COV IT PM Standard Review Project IV&V Reports	Submit Project Closeout Report	Conduct Post Implementation Review Submits Post Implementation Report
Project Manager		Develop project proposal and Charter	Submit Required Documentation – COV IT PM Standard	Submit Required Documentation – COV IT PM Standard Review Project IV&V Reports	Complete Project Closeout Report (Template)	

Appendix D. Project Management Lifecycle – Non-major IT Projects Greater than or Equal to $100,000

Lifecycle Phases	Selection	Initiation	Planning	Execution & Control	Closeout	Operations & Support
Decision Points	**Approved for Planning** →	**Approved for Development** →	**Baseline Approved** →			
Roles and Responsibilities for Project Management						
Chief Information Officer (CIO)	Approve Agency IT Strategic Plan (Approve Projects for Planning)	Approve Project for Development	Resolve Issues as Required Modify, Suspend, or Terminate	Monitor Project Progress Modify, Suspend, or Terminate		
VITA Project Management Division	Recommend Approval of IT Strategic Plan to CIO	Recommend Project Initiation to CIO/ITPRC	Assist and Support Project Detailed Planning	Review Project Progress Assist and Support Project Development	Reviews Project Closeout Report	
Project Sponsor/Program Manager	Select Project in Agency IT Strategic Plan	Submit Project and Proposal	Review Required and Approve Documentation – COV IT PM Standard	Review Required Documentation – COV IT PM Standard	Submit Project Closeout Report	Conduct Post Implementation Review Submits Post Implementation Report
Project Manager		Develop project proposal and Charter	Submit Required Documentation – COV IT PM Standard	Submit Required Documentation – COV IT PM Standard	Complete Project Closeout Report (Template)	

Appendix E. Commonwealth IT Project Management Governance Structure



Generally, project reporting and decision requests flow from the bottom to the top. Approvals and information request flow from the top to the bottom. VITA Project Management Division supports the entire governance structure.